



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,689	07/31/2003	Michael John Mania	15772.0003	7659
23517	7590	08/25/2006	EXAMINER	
BINGHAM MCCUTCHEN LLP			FORD, JOHN K	
3000 K STREET, NW			ART UNIT	
BOX IP			PAPER NUMBER	
WASHINGTON, DC 20007			3753	

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/630,689	Applicant(s) MANIA ET AL.	
	Examiner John K. Ford	Art Unit 3753	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/22/06
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-12, 16-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1, 3-12, 16-26 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Applicant's response accompanying the RCE of June 22, 2006 has been carefully considered. At the onset, please note that this application has been assigned to a new examiner. Please address all future responses to the undersigned.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 3-12, 16-18, drawn to an apparatus for attaching a leaded component to a substrate, classified in class 165, subclass 80.3.
- II. Claims 19-26, drawn to a method of mounting a heat sink, classified in class 165, subclass 76.

The inventions are independent or distinct, each from the other because:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus can be used to practice a materially different process such as not affixing the mounting plate to the substrate, but rather simply placing the mounting plate on the component with no connection between the mounting plate and the substrate. It is also apparent that the method of claim 19 can be practiced using numerous different patentably distinct apparatuses such as the three species

Art Unit: 3753

identified below in the election requirement as well as the structure shown in Johnson et al (USP 4,203,488).

This application contains claims directed to the following patentably distinct species:

First species of Figure 1,

Second species of Figure 2 and

Third species of Figure 3

The examiner is unsure if Figure 1 and 2 are separate species, however, because Figure 2 uses completely different reference numerals than Figure 1, the examiner has resolved this ambiguity by assuming it is a separate species. If applicant goes on the record and states that Figure 2 is simply a schematic in nature cross-sectional view of the species of Figure 1, then the examiner will withdraw this aspect of the election requirement.

In addition applicant must elect between the following thermal interface sub-species:

First sub-species in which there is no thermal interface (e.g. as shown in Figure 1)

Second sub-species in which there is a thermal interface (e.g. as shown in Figures 2 and 3).

In addition applicant must elect between the following mounting plate sub-species:

First sub-species in which the mounting plate is electrically insulating (e.g. as claimed in claim 13)

Second sub-species in which the mounting plate is electrically conductive (e.g. as claimed in claim 14).

In addition applicant must elect between the following component sub-species:

First sub-species in which the component is surface mounted (e.g. as claimed in claim 17)

Second sub-species in which the component is through hole mounted (e.g. as claimed in claim 18).

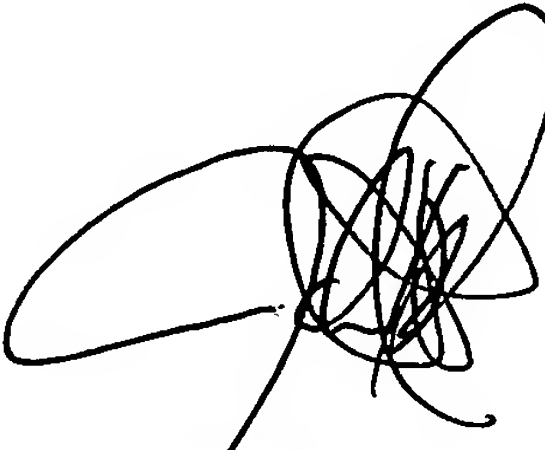
The species are independent or distinct because they have mutually exclusive characteristics that are burdensome to ferret out in the limited time allotted for examination.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, the examiner is unsure if any claim is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.  
MPEP § 809.02(a).

Any inquiry concerning this communication should be directed to John K. Ford at telephone number 571-272-4911.



**John K. Ford**  
**Primary Examiner**